The genius of the twentieth century, Albert Einstein, once said “imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world, and all there ever will be to know and understand.” We imagine various things in various fields every day. From our juvenile years, we have used imagination when playing with friends, predicting the future, and picturing non-existing things in life. Imagination is a creative picture visualised by the mind of each individual, often which cannot be physically perceived. Using imagination, we have enhanced our knowledge, academic or otherwise. So, if Einstein’s quote is true, we come to ask ourselves: is imagination a credible way of knowing? Does the use of imagination allow to guide us when acquiring new knowledge? Can imagination be listed side by side with the other Ways of Knowing (WOK) from the traditional TOK diagram: language, emotion, reason, and sense perception? My thesis is that imagination enhances the acquisition of knowledge but at the same time, knowledge is the basis of all imagination therefore there is a limit to our imagination capacity.

How exactly does imagination play a role in our daily life? When I try to imagine, many images continuously pass my mind: what I would be like in twenty years, pink unicorns, a story from a book, to list a few. In relation to the WOKs in the traditional TOK diagram, imagination is intertwined with language, emotion, reason, and sense perception. My emotions can change according to what I imagine; for example, if I imagine all the exciting unknowns awaiting for me in the future, I feel excited and happy. Sense perception can affect and also be affected by imagination. I have once faced a situation when I passed an opaque window of a gymnasium when I suddenly heard something hard hit hard on the ground and a girl scream. I opened the window to see if everything was alright, imagining that the girl to be hurt. However, what was happening was completely different from what I imagined; two girls were having a race across the gymnasium and one girl was screaming in joy of beating the other. From only the sounds that I heard, I imagined a different situation to what was happening. Now, when connecting the (Areas of Knowledge) AOKs in the traditional TOK diagram to imagination, I think that the most relevant AOK would be, without doubt, arts. But what about in other AOKs? Mathematics, language, human sciences, ethics, history and natural sciences all seem like imagination is most unnecessary. I will explore the use of imagination through two AOK and the knowledge issues each AOK raises to observe the true credibility of imagination as a WOK.

There is a famous quote a mathematician David Hilbert said when his student gave up mathematics to become a novelist. He said “It’s just as well – he had no imagination.” For me, mathematics is a subject of logic, so what Hilbert said was truly unexpected. How is imagination necessary in mathematics? How has imagination contributed to the mathematical discoveries? It can be claimed that imagination has allowed further mathematical understanding. Take the concept of imaginary number for instance; this itself includes the word “imagine” and it is a concept of a number that equals negative one when squared, which should be impossible. Also, when solving a real-life situation problem, I often imagine the situation in my head in order to figure out how to solve the question. For example, if the question asked me how to measure the height of a building from a certain distance, I would imagine looking up at the building and figuring out what values are necessary in order to apply the theories I have learnt. In such situations, imagination is highly necessary. However, some mathematics are entirely logical, based on reason, and cannot be imagined. Imaginary number can be taken as just a concept that is built around a logical assumption. It is saying that if such number were to exist, the other mathematical theories that are built around that one concept is to exist as well. This is entirely logical and thus does not require imagination.

What is the role of imagination in the human sciences? To what extent can imagination be applied in understanding and expanding the knowledge of sciences? When learning new things in human sciences, imagination enables the ease of understanding and perceiving knowledge. When building hypothesis for various theories and experiments, imagination allows to think of various possible situations. For example, when doing an urban structure investigation for my geography class, I imagined the city and its characteristics before actually going to the city to do the investigation. Through this imagination, I came up with possible results that can be obtained. However, it can be claimed that the truth cannot be proofed by imagination. Experiments and observations are what proves the reality and so imagination cannot conclude anything. No matter how busy I imagine the city to be, unless I go to the city and see for myself, there is no definite proof or evidence that the city is busy. On the other hand, it can be claimed that imagination is the starter of all ideas. It allows people to place various ideas in the first place, thus leading to various experiments and observations. However, imagination is purely based on the gained knowledge and previous experiences. It is impossible to imagine something that you know completely nothing about. Though it is often said that imagination is limitless, there actually is a limit and imagination is all based on what you already know. So, in cases of human sciences, we build hypothesis taking in account of the facts we know already about or we ‘imagine’ different situations because we already have images or situations inputted in our memory.

Imagination as a fifth Way of Knowing in the traditional TOK diagram seems possible, however, there are various setbacks. What is thought to be imagination can just be an assumption or a condition so that a logical extension can be made. New knowledge can be derived from imagination, but imagination itself is greatly dependent on the amount of knowledge one possesses and it cannot go beyond the possessed knowledge. With more gained knowledge, imagination can expand. However, it may not be the sufficient tool when using it as a Way of Knowing. Referring back to Albert Einstein’s quote, imagination is mentioned to be limitless, however, he may have said those words because he was a ‘genius’ who had more knowledge compared to others, thus making it possible for his imagination to be almost limitless. Imagination is always based on what has already been known or experienced, so including imagination as a fifth Way of Knowing is not probable.